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--19. A method for discriminating between species of *Shigella* and *E. coli* or for discriminating among species of *Shigella* and *E. coli* in a sample containing organisms of one or more taxonomic groups comprising:

- a. selecting an oligonucleotide having a sequence from a RNA operon, wherein the sequence differs by one or more bases from at least one of the operons from the two or more species being discriminated, and wherein the oligonucleotide is capable of discriminating between species after hybridization by the use of two or more wash temperatures at or above the oligonucleotide's calculated or experimentally determined T_m or equivalent wash conditions;
- b. hybridizing the oligonucleotide to nucleic acid from the sample; and
- c. determining the presence or absence of hybridizing nucleic acid.

20. The method of claim 19, wherein an oligonucleotide of SEQ ID NO.: 1 is used to discriminate between or among *Shigella* and *Escherichia*.

21. The method of claim 19, wherein an oligonucleotide of SEQ ID NO.: 2 is used to discriminate between or among *Shigella* and *Escherichia*.

22. The method of claim 19, wherein an oligonucleotide of SEQ ID NO.: 3 is used to discriminate between or among *Shigella* and *Escherichia*.

23. The method of claim 19, wherein an oligonucleotide of SEQ ID NO.: 4 is used to discriminate between or among *Shigella* and *Escherichia*.

24. The method of claim 19, wherein an oligonucleotide of RNA is used, wherein the oligonucleotide sequence comprises a sequence selected from the group consisting of SEQ ID NOs. 1, 2, 3, or 4, and wherein U substitutes for T.